

NE
a second gene expressible in said at least one plant cell, said second gene, when expressed in said at least one plant cell, conferring a non-naturally occurring trait of interest on said at least one plant cell;

regenerating the at least one plant cell to at least one whole plant; and

applying a chemical agent to said at least one whole plant, said chemical agent being configured to be converted into a phytotoxic agent of said at least one whole plant by one or more gene products of said conditionally lethal gene.

80. (Amended) The method of claim 79, wherein said applying said chemical agent comprises applying said chemical agent in an amount selected to effect a sub-lethal level of said phytotoxic agent in said at least one whole plant upon said conversion by said one or more gene products of said conditionally lethal gene.

81. (Amended) The method of claim 80, further comprising visually identifying a sub-lethal phenotype of said at least one whole plant.

82. (Amended) The method of claim 79, wherein the genetic construct comprises oncogene 2 as the conditionally lethal gene, and wherein the chemical agent comprises an indoleamide or a related derivative.

83. (Amended) The method of claim 82, wherein the indoleamide is naphthalene acetamide.

84. (Amended) The method of claim 79, wherein the at least one whole plant is a variety of Brassica.

85. (Amended) The method of claim 84, wherein said second gene confers upon said variety of Brassica a high oleic, low linoleic acid genotype.

86. (Amended) The method of claim 85, wherein the variety of Brassica plant is variety AG-019 or derivatives thereof.

87. (Amended) A method for selecting a germinating seed or plant embryo comprising oncogene 2 as a transgene, comprising:

providing at least one transgenic plant cell of a plant seed or plant embryo, said at least one transgenic plant cell including oncogene 2 as a transgene;

culturing the at least one transgenic plant cell on a medium comprising an indoleamide or a related derivative; and

visually identifying the at least one transgenic plant cell by its expression of an auxin-overproduction phenotype.

88. (Amended) The method of claim 87, wherein said medium further comprises an auxin transport inhibitor.

NE
89. (Amended) The method of claim 88, wherein the auxin transport inhibitor is selected from the group consisting of N-(1-naphthyl)phthalamic acid, 2,3,5-triiodobenzoic acid, 9-hydroxyfluorene-9-carboxylic acid, erythrosine, eosine, fluorescein, semicarbazone, and ethanphon.

90 (Amended) The method of claim 87, wherein the indoleamide is naphthalene acetamide and the auxin transport inhibitor is naphthylphthalamic acid.

91. (Amended) The method of claim 87, wherein the at least one plant cell comprises a seed or a plant embryo.

92. (Amended) The method of claim 87, wherein the at least one plant cell is derived from a variety of Brassica.

93. (Amended) The method of claim 92, wherein the variety of Brassica is a variety having a high oleic acid, low linoleic acid profile.

94. (Amended) The method of claim 92, wherein the variety of Brassica is variety AG-019 or derivatives thereof.

95. (Amended) The method of claim 87, further comprising transferring the at least one transgenic plant cell to a second medium free from indoleamide and recovering the at least one transgenic plant cell.

96. (Amended) The method of claim 95, wherein the second medium comprises naphthalene acetic acid.

97. (Amended) The method of claim 87, further comprising transforming at least one plant cell with oncogene 2 to obtain said at least one transgenic plant cell.

98. (Amended) A method for producing a transgenic plant comprising oncogene 2 as a transgene, comprising:

providing at least one transgenic plant cell of a plant seed or plant embryo, said at least one transgenic plant cell including oncogene 2 as a transgene;

culturing the at least one transgenic plant cell on a medium comprising naphthalene acetamide and an auxin transport inhibitor;

visually identifying the at least one transgenic plant cell by its expression of an auxin-overproduction phenotype; and

transferring the at least one transgenic plant cell to a second medium comprising naphthalene acetic acid to recover the at least one transgenic plant cell.

